



Chesapeake Bay Partner Community Award Benchmark Achievements Explanations

Theme 1: Improving Water Quality

- 1A. *Develops and implements stormwater management requirements that address both the quality and quantity of stormwater for new development and redevelopment.*

The Mayor and Council of Rockville have a long-standing commitment to preserving the environment, and to stormwater management (SWM) in particular. The City adopted SWM laws and regulations in 1978, long before the State or Federal governments had any SWM requirements. When the City established its SWM program in 1978 (Chapter 19 of the Rockville City Code), it intended that SWM would eventually be provided for the entire City. At that time much of the city had already been developed, and an aggressive plan for retrofitting these already developed regions was adopted.

The City's SWM requirements have been revised several times to keep pace with changes in State or Federal requirements. In October 2000, the State of Maryland adopted new SWM requirements in the Code of Maryland Regulations (COMAR) Title 26, Subtitle 17.02. All counties and municipalities were required to incorporate the new state requirements in local ordinances, after obtaining approval of the revisions from the Maryland Department of the Environment (MDE). On January 1, 2002, the City began requiring SWM designs to meet the new State of Maryland law and SWM Design Manual adopted in October 2000. On September 9, 2002, the Mayor and Council adopted a new City ordinance and regulations to reflect the changes mandated by MDE. These changes alter the sizing and design requirements for SWM facilities, making them more effective at pollutant removal and prevention of downstream erosion, and allow for the use of a wider variety of watershed management techniques include environmentally sensitive site design, stream restoration projects and other watershed improvements. The City is currently revising its SWM regulations yet again to include additional water quality enforcement regulations per the City's Phase II National Pollution Discharge Elimination System (NPDES) requirements.

- 1B. *Develops and implements a program that addresses the need for appropriate routine maintenance of stormwater management structures.*

Maintenance is one of the key elements to the success of Rockville's SWM programs. Rockville maintains an inventory of existing public and private SWM facilities, and performs routine inspections of all public facilities. The City's Department of Public Works (DPW) administers a private contract to provide the required routine (leaf and litter removal, clearing debris from the outlet) and non-routine (structural) maintenance of its public SWM facilities. Approximately \$100,000 is spent each year to provide the necessary maintenance to public SWM facilities.

- 1C. *Develops and implements guidelines for the use of innovative stormwater management practices and encourages their use where they are appropriately applied. Techniques may include sandfilters and other underground facilities (in highly urbanized areas), vegetative practices, BayScaping, bioretention, and low impact development.*

In conjunction with the College Gardens Civic Association (CGCA), the City of Rockville obtained a grant through the National Fish and Wildlife Foundation and has implemented a low impact development (LID) pilot study in the College Gardens neighborhood. This pilot project has educated the residents on LID practices that they can implement on their own property such as rain gardens, rain barrels, downspout disconnection, etc. through a series of workshops, and has even subsidized the purchase of rain barrels and construction of rain gardens.

Additionally, Rockville's SWM requirements have been revised to reflect changes in Maryland state law (see 1A). These changes alter the sizing and design requirements for SWM facilities, making them more effective at pollutant removal and prevention of downstream erosion, and allow for the use of a wider variety of watershed management techniques including environmentally sensitive site design, stream restoration projects and other watershed improvements.

- 1D. *Implements, or is in the process of implementing, Nutrient Removal Technology (NRT) measures at one or more wastewater treatment plants or on-site septic systems.*

N/A – Not Applicable: No wastewater treatment plants exist in the City of Rockville. The City's public sewer system discharges into the Washington Suburban Sanitary Commission's (WSSC) system.

- 1E. *Implements a maintenance or management program to reduce the impacts of septic systems on water quality.*

Rockville's approach to minimizing the impact of septic systems on water quality is by ensuring that all properties within the city limits are served by public sewer. Chapter 24 of the City Code (Water, Sewers and Sewage Disposal) disallows the construction of any new septic systems, and requires all properties accessible to public sewer mains to connect to them. Any property that files for redevelopment or annexation into the City must connect to public sewer. Thus only properties that were developed before public sewer was available in Rockville ever had septic, and the few remaining properties with septic systems will be connected to public sewer.

- 1F. *Implements a program to retrofit existing impervious surfaces (rooftops, parking lots, roadways, etc.) with best management practices to reduce the amount of impervious surface.*

Currently the City of Rockville does not have a program to retrofit existing impervious surfaces with best management practices. However, Sections 25-431 through 25-438 of the Zoning Ordinance (Chapter 25 of the City Code) specify that parking spaces must have landscaping requirements. This often results in open or green area in a development where concrete or asphalt would normally be. Additionally, Chapter 10.5 of the City Code is Rockville's Forest and Tree Preservation Ordinance (FTPO). The FTPO requires tree save, and often reforestation or aforestation depending on the disturbed area.

- 1G. *Develops and implements a program to minimize the impacts of roadways de-icers or other roadway maintenance chemicals on water quality.*

Rockville uses sodium chloride (no sand) for roadway deicing that we obtain through the Metropolitan Washington Council of Governments (MWCOG) contract, which provides material for most municipalities in this region. To minimize deicer application, Rockville's

truck-mounted spinners have several settings to allow for varying conditions, are linked to the road speed of the vehicle, and are calibrated each year to ensure consistent application rates. Additionally, Rockville will be replacing our salt storage dome next spring. The new design will minimize runoff, and will also involve upgraded stormwater management facilities.

1H. *Implements a recycling program with minimum residential participation of 25%.*

As part of the City's once-a week, year-round curbside recycling program the City collects all manner of recycleables including glass and metal food and beverage containers placed in a bin furnished by the City, newspaper in grocery bags or tied with twine and yard refuse for composting; whitegoods including washers, dryers, stoves, refrigerators, freezers, metal cabinets, metal doors and other pieces of scrap metal are collected by appointment.

By tonnage, recycleables account for approximately 35% of material collected in Rockville.

1I. *Implements pollution prevention program for local government facilities/lands (i.e., alternative fuels program, green lights energy conservation program, and preventative fleet maintenance practices).*

None.

1J. *Implements or otherwise participates in a public household hazardous waste disposal program (including used oil and antifreeze).*

Household Hazardous Waste Collection is provided once a week for used oil, batteries (including car batteries) and tires. There is a once-a-month collection for materials such as oil-based paint; flammable liquids (not including gas); pesticides and poisons; acids and caustics; and swimming pool chemicals. Additionally, the City of Rockville's motor vehicle division recycles their used engine oil for heating the shop. Their used oil filters, excess used oil, and antifreeze are collected for recycling by Saftey Klean.

1K. *Develops and implements a program to encourage Integrated Pest Management (IPM) and nutrient management on the municipality's property and on agricultural, recreational, residential and/or commercial lands.*

The Parks Division, including our municipal Redgate Golf Course, follows IPM principles for all pesticide applications. We also adhere to the State of Maryland Nutrient Management Program regulating nitrogen and phosphorus applications, and require all of our contractors to do the same.

1L. *Other local government initiatives that improve water quality.*

As a small municipal separate storm sewer system (MS4) community, Rockville is covered by a National Pollution Discharge Elimination System (NPDES) Phase II general permit. This programmatic permit requires Rockville to engage in many activities that directly influence local water quality. Some examples of this include public education about non-point source pollution reduction for homeowners, storm drain stenciling/marketing programs, stream cleanups, illicit discharge detection and elimination (IDDE) inspections, minimizing pollution from municipal operations, and many more.

Theme 2: Promoting Sound Land Use

- 2A. *Implements a Comprehensive Plan that is based on a shared community vision and promotes efficient development patterns and densities that protect and enhance environmental resources.*

The City of Rockville's Master Plan was originally adopted in 1960. It has been revised and updated several times, with the most recent version adopted on November 12, 2002. The Master Planning process attempts to involve as many stakeholders as possible through a series of workshops and open houses. Residents, civic associations, the business community, real estate and property ownership companies and developers are all invited to participate. This process ensures that the Master Plan truly reflects a shared community vision for Rockville. To make sure that the Master Plan adequately reflects current thinking, the Annotated Code of Maryland mandates that it be reviewed every six years.

In addition to the Master Plan, several neighborhood plans have been developed to preserve the individual character of neighborhoods with an eye to the future. These include the East Rockville Neighborhood Plan (2004), Lincoln Park Neighborhood Plan (1984; currently being updated), Twinbrook Neighborhood Plan (1982; currently being updated), West-End Woodley Gardens East/West Neighborhood Plan (1989), and The Rockville Pike Corridor Neighborhood Plan (1989; currently being updated). Recent neighborhood planning efforts have included recommendations to enhance tree cover, watershed protection and neighborhood sustainability, among other topics.

- 2B. *Implements zoning and/or subdivision regulations that support ecologically-based designs to limit impervious cover in undeveloped and moderately developed watersheds and/or reduce the impact of impervious cover in highly developed watersheds.*

All Rockville watersheds are moderately to highly developed watersheds. There are several aspects of the Zoning Ordinance (Chapter 25 of City Code) that protect the watershed in this urban / suburban environment. Current zoning regulations limit lot coverage on individual lots based on the zone. However, most recent development in the City has followed the more flexible development options that take into account clustering of development and preservation of open space, particularly stream valleys and other significant environmental features. These Special Development Procedures allow for implementation of specific zoning standards for individual projects. Rockville is currently involved in the midst of a complete zoning ordinance re-write that will include enhanced environmental regulations.

The City has also adopted ordinances that protect floodplains and forest areas, as described in Chapter 10 of the Rockville City Code. In addition, the Mayor and Council adopted Environmental Guidelines in July 1999 that require new developments to identify and protect natural resources including wetlands, steep slopes, stream buffers, unsafe and unsuitable soils, and threatened and endangered species. These are the primary regulations that support ecologically based designs.

- 2C. *Utilizes land use management and water protection approaches that encourage the concentration of new residential development in areas supported by adequate water resources and infrastructure to minimize impacts on water quality.*

Development in the City of Rockville occurs through either infill development or annexation of developable land into the corporate limits. The City's Master Plan provides a section on goals of development in Residential Neighborhood Areas to ensure that development and redevelopment has minimal negative impact in residential areas. Thus any new

development occurs in areas where infrastructure to support the new structures is already established.

Additionally, parks have a high level of protection that ensures that such open space will not be developed at a later date. One example is the Upper Watts Branch Forest Preserve that helps protect the headwaters of Watts Branch watershed.

2D. *Implements a program or policy to support mixed-use development.*

The City has approved development of two major parcels of land under the Comprehensive Planned Development (CPD) procedure. The purpose of the CPD procedure is to allow a more creative approach to development, accomplish a more desirable environment, promote the efficient use of land, and enhance the appearance and value of neighborhoods through preservation of natural features with the provision for recreation areas and open space.

These two major farm parcels were developed into neo-traditional, planned urban developments. The development plans support a mix of uses, including single family and multifamily residential, neighborhood shopping and office space. For the King Farm development, the use of this development procedure allowing a mix of uses resulted in public open spaces, private recreation areas, tree preservation and conservation areas, preservation of the headwaters of the Watts Branch Creek, school sites and a reservation for a future transit way to the Shady Grove Metro Station.

In addition, the City has zoned the land around the Rockville and Twinbrook metro stations for transit-oriented mixed-use development at density levels to support the transit facilities. Both areas also have urban design guidelines that provide a framework for building form in the vicinity.

2E. *Engages in intergovernmental or regional cooperative efforts to address and resolve growth and development issues (i.e., joint planning commission, joint growth management and economic development task force, regional commission, watershed management team).*

As the seat of the County government, the City of Rockville works closely with Montgomery County in growth and development issues. This occurs through staff level coordination, as well as joint sessions with the County Planning Board on issues of mutual concern. Rockville also participates as an interested party at public hearings and written testimony at both the Montgomery County Planning Board and County Council.

Rockville is also a suburb community of Washington D.C. The Metropolitan Washington Council Of Governments (MWCOC) provides a forum for sharing information on many growth and development, environmental and transportation issues of the region. For example, Rockville participates in the Forecasting Subcommittee, which looks at future land use and forecasting projections for population and employment for the entire D.C. region. The City also participates in the Planning Directors Technical Advisory Committee and Metropolitan Development Policy Committee, which examine regional land use issues.

2F. *Implements and/or promotes a program or policy that supports infill development or promotes the reuse of downtown areas.*

Development in the City of Rockville occurs through either infill development or annexation of developable land into the City. The City's Master Plan provides a section on goals of development in Residential Neighborhood Areas to ensure that development and redevelopment has minimal negative impact in residential areas.

The City's Town Center Master Plan, adopted in 2001, contains an overall vision as a daytime, evening and weekend activity center that is easily identifiable, pedestrian-oriented, and incorporates a mix of uses and activities. The City has been implementing the Plan recommendations through a public-private partnership, which will result in a 12-acre redeveloped area containing residential, retail and public uses.

- 2G. *Implements a program for maintaining and protecting urban resource lands including parks, open spaces, natural trails, and public access sites – county economic development organizations might also be involved.*

All parks are protected under Chapter 14 of the City Code. To ensure their protection, the City requires that a Recreation and Parks Advisory Board oversee programs that ensure the protection and conservation of the established City Parks. See also 2H.

- 2H. *Identifies land worthy of additional protections and has adopted appropriate plans, implementation ordinances, regulations and/or incentives.*

Forested areas are retained and created through the Forest and Tree Preservation Ordinance. The City has a Parkland Acquisition CIP project, used to purchase environmentally sensitive land. This project is currently underfunded. The City also actively seeks new land through parkland dedication during the development / redevelopment process. In some cases the developer provides land, and in others the developer provides the land and also builds a park.

- 2I. *Works cooperatively with private land trusts, conservancy organizations, and private landowners to establish and implement volunteer easement programs that protect farmland, forest and other natural areas.*

N/A – The City of Rockville has no large landowners to participate in these sorts of programs. Most land is protected through dedication to the City as parkland, or through conservation easements required by the Forest and Tree Preservation Ordinance.

- 2J. *Implements and enforces an agricultural zoning district on prime agricultural lands that limits development density.*

N/A – No agriculture within Rockville.

- 2K. *Implements or participates in a transfer of development rights (TDR) program and/or a purchase of development rights (PDR) program.*

N/A – Not applicable to an area the size of Rockville. Montgomery County has TDR/PDR programs.

- 2L. *Institutes measures to encourage the use of alternative transportation modes. Examples of alternative transportation modes include car pools, greenway trails, and bicycle pedestrian trails, shared taxi, and/or mass transit facilities.*

The City of Rockville's Traffic and Transportation Division is committed to providing infrastructure that encourages the use of alternative transportation. Examples include:

- Implementing the City's Comprehensive Transportation Review (CTR) Methodology. The CTR requires developers to implement sidewalks, bicycle facilities, and transit amenities on-site. It also requires off-site improvements to sidewalks, bicycle facilities, and transit amenities that lead to activity centers and popular destinations.
- Obtaining annual payments from developers to help fund the City's Transportation Demand Management (TDM) program. The TDM program was formed in part to

reduce single-occupant vehicular trips along the Rockville Corridor Area and promote transit and ridesharing.

- Requiring large developers (particularly commercial development, such as Rockville Town Center and Twinbrook Commons development) to fund their own Transportation Demand Management programs to reduce auto trips and encourage alternative forms of transportation such as walking, biking, taking transit, carpooling, etc
- Implementing facilities identified in the City's Bicycle Master Plan.
- Representation on the Washington Council of Government's Transportation Planning Board and Technical Committee that promotes alternative forms of transportation to reduce air pollution and conform with federal guidelines for auto emissions.

2M. *Other local government initiatives and programs that promote sound land use.*
None that haven't already been mentioned.

Theme 3: Protecting and Restoring Living Resources and Habitat

- 3A. *Works cooperatively with the state, other local governments, community groups, and watershed organizations to develop and implement watershed management plans that address the protection, conservation, and restoration of stream corridors, riparian forest buffers and wetlands.*

The City of Rockville performs a watershed study on each of its three watersheds (Cabin John Creek, Rock Creek and Watts Branch) every ten years. The local community is heavily involved in this process – civic associations, local watershed or other community groups and other governmental organizations are all invited to attend in series of public meetings as the study progresses. Based on the results of the watershed plans, projects are added to the capitol improvements program (CIP). These CIP projects typically address additional SWM within a given region, stream and riparian forest restoration, etc.

- 3B. *Develops and implements a wetlands preservation plan as a component of a locally based integrated watershed management plan.*

The City of Rockville's Environmental Guidelines, adopted July 1999 provide for additional protections of wetlands beyond those required by state or federal law. These guidelines require that both stream buffers, wetlands, and associated wetland buffers be identified on the Natural Resources Inventory (NRI) for all new development or redevelopment. Stream buffer widths range from 125 to 175 feet, depending on the percent slope. Wetland buffers are frequently incorporated into the stream buffer; there is a 25-foot minimum buffer for wetlands adjacent to third and higher order streams, and a 40-foot minimum buffer for wetlands adjacent to first or second order streams. These wetland buffers may be expanded up to 100 feet if steep slopes or erodible soils are present.

- 3C. *Provides technical support, financial assistance, and/or coordinates with community associations, non-profit and private organizations to protect, enhance, and restore bay grasses, wetlands, forest buffers, and/or other shoreline riverine systems to protect and restore stream health.*

The City's Department of Parks and Environmental Specialist provide technical assistance to communities to preserve the health of the streams. They also provide staff assistance to civic and homeowner's associations, and coordinate with Girl Scout, Boy Scout and school student service learning initiatives to perform stream cleanups. Furthermore, the City owns many public parks along its stream valleys and it protects them by promoting a program entitled "Growing not Mowing" which encourages the reforestation of stream buffers that were previously mowed. The City is also currently developing a community "Adopt-A-Stream" program.

- 3D. *Requires tree planting or tree conservation in all residential, commercial and industrial developments through tree restoration and conservation ordinances.*

The City adopted a Forest and Tree Preservation Ordinance (FTPO) in 1992 to protect and encourage the growth of trees in the City of Rockville. Codified in Chapter 10.5 of the City Code, the FTPO requires tree save, as well as on-site reforestation or aforestation, depending upon the size and conditions of the site.

- 3E. *Provides incentives for the restoration of riparian or streamside forest buffers greater than 35 feet from the shoreline of tidal waters, tidal wetlands, and tributary streams. (If local law is more restrictive than the state law, the more stringent of the two applies).*

No

- 3F. *Provides incentives for the protection of riparian or streamside forest buffers greater than or equal to 100 feet from the streambank or shoreline of tidal and/or non-tidal waters or freshwater streams. (If local law is more restrictive than the state law, the more stringent of the two applies).*
Stream buffers range from 125 to 175 feet, depending on percent slope. See 3B for more details.
- 3G. *Works cooperatively with the private sector or conservancy organizations to place tree buffer corridors into voluntary easement programs or create wooded buffers through planting more trees.*
No.
- 3H. *Promotes the expansion and connection of contiguous forests through conservation easements, greenways, purchase and other land conservation methods.*
Where applicable, the City encourages connection and expansion of forested greenways, stream buffers and forested parkland. Suitable sites are identified during the Natural Resource Inventory phase of the development process. During development review staff work with developers to create Forest Conservation Plans that meet or exceed the requirements of the Forest and Tree Preservation Ordinance and the Environmental Guidelines. See also 2H.
- 3I. *Promotes the provision of fish passage for migratory fish or removal of physical blockages.*
The City of Rockville requires that all new culvert installations provide for fish passage. In addition, the City completed a CIP project for the removal of fish barriers identified in the Cabin John Creek watershed study.
- 3J. *Other initiatives to protect and restore the living resources and habitats of the Chesapeake Bay.*
None that haven't already been mentioned.

Theme 4: Engaging the Community

- 4A. *Develops or participates in a public information/education program to inform citizens of actions taken to protect water quality and fish and wildlife habitat, the Bay, its rivers and streams.*

The City of Rockville has several outlets for dissemination of educational information to residents. For example, Rockville participates in the annual Science Day with a booth explaining Rockville's three watersheds, and teaching children (and parents) about non-point source pollution; we put news stories into the monthly *Rockville Reports*; we have educational television shows on stormwater management, mosquitoes, and a host of other things on our cable television station, TRC; we put informational door hangers in neighborhoods where we place storm drain markers; we put brief, seasonally relevant tips for homeowners in the quarterly *Meter Reader*, disseminated with their utility bill; and we have useful environmental information up on the City's webpage. In addition, the City's Croyden Creek Nature Center has a whole host of classes and activities for children of all ages. Lastly, a Low Impact Stormwater Management (LISWM) pilot project in the College Gardens neighborhood involved several workshops on rain gardens, rain barrels, and other LISWM techniques (such as downspout disconnection), and ultimately resulted in several residents obtaining rain barrels and having rain gardens installed at their homes.

- 4B. *Targets public information/education program to minority populations in the Chesapeake Bay watershed.*

We have not officially targeted minority populations with watershed-related educational materials; however, our storm drain markers contain Spanish as well as English text, as do our "Growing, Not Mowing" signs to maintain certain natural stream buffers.

- 4C. *Actively participates or provides opportunities for a meaningful Bay or stream outdoor experience for children and young adults (i.e., county or municipality sponsored environmental education program, school adopt-a-stream program, field trip, etc.)*

As mentioned in 4A, the City's Croyden Creek Nature Center provides extensive opportunities for outdoor educational experiences for children of all ages. The City also assists students fulfilling student service learning (SSL) hours through stream cleanups, storm drain marking, and other watershed activities.

- 4D. *Identifies public access points to the Bay, its rivers and streams, and has developed a plan for improving and enhancing access while protecting sensitive natural resources.*

Many of the stream valleys within the City of Rockville have been designated as parks or forest preserves. The streams and associated parks are clearly labeled on Rockville maps, as well as on Rockville's online GIS, providing visitors with controlled access to these natural, protected areas.

- 4E. *Assist citizens and nonprofit organizations with citizen monitoring programs that measure the water quality of local streams and rivers.*

The City's Environmental Specialist assists Audubon Naturalist Society (ANS) volunteers in performing quarterly benthic macroinvertebrate monitoring in the Rock Creek watershed, and assists with Friends of Cabin John Creek quarterly biological monitoring in the Cabin John Creek watershed. A goal of Rockville's Phase II NPDES permit is the creation of a volunteer monitoring group within the Watts Branch watershed.

4F. *Other local government initiatives to engage the community or promote stewardship of the Bay, its rivers and streams.*

The City of Rockville's Environment Commission was created to recommend policies and programs to the Mayor & Council relating to the environment; core to this mission is promoting a sustainable community through initiatives relating to natural resource management and development, energy efficiency, watershed stewardship and protection, pollution prevention, and public education. The Commission is a nine-member group of Rockville residents appointed by the Mayor & Council, and are active in community outreach and education efforts in coordination with the City.